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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/408,918	09/30/1999	SUSAN C. KROMENAKER	042390.P6518	4616

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EXAMINER

TSAI, CAROL S W

ART UNIT	PAPER NUMBER
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2857

DATE MAILED: 09/11/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/408,918

Applicant(s)

KROMENAKER ET AL.

Examiner

Carol S Tsai

Art Unit

2857

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 August 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3, 5-11, 15 and 22-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5-11, 15, and 22-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1- 3, 5-8, 11, 22-28, and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over U. S. Patent No. 6,167,538 to Neufeld et al. in view of U. S. Patent No. 6,311,056 B1 to Sandidge.

Applicants argue that the Examiner has failed to identify any part of Neufeld that teaches a performance monitoring driver. The Examiner disagrees with Applicants. As set forth above, Neufeld et al. do disclose registering a performance monitoring driver (disk driver 116 shown on Fig. 1; drive B 214 shown on Fig. 2; and driver A 308 and drive B 318 shown on Fig. 3) as a private driver with a real time operating system (operating system 108 shown on Fig. 1) (RTOS) of an input/output (I/O) processor (keyboard controller 626 shown on Fig. 6) in which the performance monitoring driver is coupled to a performance monitoring unit (PMU) (performance monitor 126 shown on Fig. 1; performance monitor (# 1) 202 and performance monitor (#2) 204 shown on Fig. 2; and performance monitor (#1) 310 and performance monitor (#2) 320 shown on

Art Unit: 2857

Fig. 3) (see Figs. 1-3; col. 4, line 34 to col. 5, line 28; col. 6, line 9 to col. 7, line 6; col. 7, line 46 to col. 8, line 7; and col. 9, line 22 to col. 10, line 37).

Neufeld et al. do not disclose translating the message request into parameters based on a set of private group parameters that are accessible by the RTOS.

Sandidge teaches translating the message request into parameters based on a set of private group parameters that are accessible by the RTOS (see col. 6, lines 20-27; col. 11, lines 3-13; col. 12, line 63 to col. 13, line 10; col. 19, lines 23-48; and col. 20, line 64 to col. 21, line 10).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Neufeld et al.'s method to include translating the message request into parameters based on a set of private group parameters that are accessible by the RTOS, as taught by Sandidge, in order to perform an operation defined by the operation identifier which can define an operation specified from a list of available operations (see Sandidge Abstract, lines 15-17).

As to claims 22, 25, and 26, Neufeld et al. disclose a machine readable storage medium (RAM 620 and Rom 622 shown on Fig. 6) having instructions stored thereon that when executed by a processor (microprocessor 616 shown on Fig. 6) cause a system to: register a performance monitoring driver (disk driver 116 shown on Fig. 1; drive B 214 shown on Fig. 2; and driver A 308 and drive B 318 shown on Fig. 3) as a private driver with a real time operating system (operating system 108 shown on Fig. 1) (RTOS) of an input/output (I/O) processor (keyboard controller 626 shown on Fig. 6) in which the performance monitoring driver is coupled to a performance monitoring unit (PMU) (performance monitor 126 shown on Fig. 1; performance

Art Unit: 2857

monitor (#1) 202 and performance monitor (#2) 204 shown on Fig. 2; and performance monitor (#1) 310 and performance monitor (#2) 320 shown on Fig. 3) (see Figs. 1-3; col. 4, line 34 to col. 5, line 28; col. 6, line 9 to col. 7, line 6; col. 7, line 46 to col. 8, line 7; and col. 9, line 22 to col. 10, line 37); select events within the I/O processor to gather data on (see col. 2, lines 48-63; col. 6, lines 9-34; and col. 14, lines 1-3); send the selected events as a message request from a host processor to the RTOS of the I/O processor (see Abstract, lines 9-12; col. 2, lines 10-16; and col. 4, lines 11-27).

Neufeld et al. do not disclose translating the message request into parameters based on a set of private group parameters that are accessible by the RTOS.

Sandidge teaches translating the message request into parameters based on a set of private group parameters that are accessible by the RTOS (see col. 6, lines 20-27; col. 11, lines 3-13; col. 12, line 63 to col. 13, line 10; col. 19, lines 23-48; and col. 20, line 64 to col. 21, line 10).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Neufeld et al.'s method to include translating the message request into parameters based on a set of private group parameters that are accessible by the RTOS, as taught by Sandidge, in order to perform an operation defined by the operation identifier which can define an operation specified from a list of available operations (see Sandidge Abstract, lines 15-17).

As to claims 2 and 23, Neufeld et al. also sending the message request as a translated request to the performance monitoring unit; returning the pieces of data requested by the translated request to the performance monitoring driver; and sending the pieces of data to a

Art Unit: 2857

location specified in the message request (see col. 5, lines 5-49; col. 6, line 9 to col. 7, line 35; and col. 7, line 61 to col. 8, line 67).

As to claims 3 and 24, Neufeld et al. also disclose initiating a performance monitor application that generates a selection screen on display coupled to the I/O processor through the host processor in which selecting events within the I/O processor on which to gather data includes selecting the events at the selection screen (see col. 7, lines 36-45).

As to claims 7, 8, 27, and 28, Neufeld et al. also disclose the set of private group parameters including control parameters for hardware-based performance monitoring resources (see col. 5, lines 35-38).

As to claims 11 and 31, Neufeld et al. also disclose sending the pieces of data at a time period specified in the message request (see col. 8, lines 39-67).

4. Claims 9, 10, 15, 29, 30, and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Neufeld et al. in view of Sandidge as applied to claims 1, 11, 22, 23, and 31 above, and further in view of U. S. Patent No. 6,052,694 to Bromberg.

As noted above, with respect to claims 9, 10, 29, and 30, Neufeld et al. in combination with Sandidge teach all the features of the claimed invention, but do not disclose generating performance monitoring storage tables within memory of the I/O processor.

Bromberg teach generating performance monitoring storage tables within memory of the I/O processor (see col. 4, lines 14-34).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Neufeld et al. in combination with Sandidge's system to include

Art Unit: 2857

generating performance monitoring storage tables within memory of the I/O processor, as taught by Bromberg, in order to provide an advantage of facilitating convenient export of all or a subset of the performance values into analysis tool for analysis (see Bromberg col. 6, lines 4-5).

As to claims 15 and 32, Neufeld et al. in combination with Sandidge do not disclose generating a message that causes a fan internal to the host system to turn on in response to the pieces of data returned from the performance monitoring unit.

The Examiner takes Official Notice that generating a message that causes a fan internal to the host system to turn on in response to the pieces of data returned from the performance monitoring unit, is well known in the art.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Neufeld et al. in combination with Sandidge's system to include generating a message that causes a fan internal to the host system to turn on in response to the pieces of data returned from the performance monitoring unit, in order to cool down the heat produced in the computer system.

Response to Arguments

5. Applicant's arguments filed 08/06/2002 have been fully considered but they are not persuasive.

Applicants argue that the Examiner has failed to identify any part of Neufeld that teaches a performance monitoring driver. The Examiner disagrees with Applicants. Based on Applicants' claimed language, "registering a performance monitoring driver as a private driver with a real time operation system (RTOS) of an input/output (I/O) processor, wherein the performance

Art Unit: 2857

monitoring driver is coupled to a performance monitoring unit (PMU)", that the Examiner could broadly interpret the performance monitoring driver as a driver of any kind, since Applicants did not clearly and particularly define what is performance monitoring drive for but a drive that is coupled to a performance monitoring unit. In addition, as set forth above, Neufeld et al. do disclose registering a performance monitoring driver (disk driver 116 shown on Fig. 1; drive B 214 shown on Fig. 2; and driver A 308 and drive B 318 shown on Fig. 3) as a private driver with a real time operating system (operating system 108 shown on Fig. 1) (RTOS) of an input/output (I/O) processor (keyboard controller 626 shown on Fig. 6) in which the performance monitoring driver is coupled to a performance monitoring unit (PMU) (performance monitor 126 shown on Fig. 1; performance monitor (# 1) 202 and performance monitor (#2) 204 shown on Fig. 2; and performance monitor (#1) 310 and performance monitor (#2) 320 shown on Fig. 3) (see Figs. 1-3; col. 4, line 34 to col. 5, line 28; col. 6, line 9 to col. 7, line 6; col. 7, line 46 to col. 8, line 7; and col. 9, line 22 to col. 10, line 37).

Applicants argue that Neufeld et al. do not teach a real time operating system of an input/output processor. The Examiner disagrees with Applicants. As set forth, Neufeld et al. do disclose an input/output (I/O) processor (keyboard controller 626 shown on Fig. 6). In addition, it is well known in the art that a input/Output processor is a hardware designed to interface the CPU to numerous I/O devices, such as the keyboard, mouse, and a printer. Neufeld et al. disclose the keyboard controller to receive input from keyboard 614 and send decoded symbols for each pressed key to microprocessor 616 over bus 628 (see col. 11, lines 15-18) that definitely meet the definition of input/output process.

Applicants argue that Neufeld et al. do not teach a performance monitoring driver, a real time operating system or registering a driver with a real time operating system. The Examiner disagrees with Applicants. As set forth, Neufeld et al. do disclose a performance monitoring driver (disk driver 116 shown on Fig. 1; drive B 214 shown on Fig. 2; and driver A 308 and drive B 318 shown on Fig. 3), a real time operating system (operating system 108 shown on Fig. 1) or registering a driver with a real time operating system (col. 5, lines 5-28).

Applicants argue that Neufeld et al. in combination with Sandidge do not teach each element of claim 1. The Examiner disagrees with Applicants. As set forth, Neufeld et al. disclose the claimed invention, except for translating the message request into parameters based on a set of private group parameters that are accessible by the RTOS. Sandidge teaches translating the message request into parameters based on a set of private group parameters that are accessible by the RTOS (see col. 6, lines 20-27; col. 11, lines 3-13; col. 12, line 63 to col. 13, line 10; col. 19, lines 23-48; and col. 20, line 64 to col. 21, line 10). The combination of Neufeld et al. and Sandidge clearly discloses the claimed invention.

Applicants argue that combination of Neufeld et al., Sandidge, and Bromberg does not teach elements of claims 9, 10, 15, 29, 30, and 32. As set forth, Neufeld et al. in combination with Sandidge teach all the features of the claimed invention, but do not disclose generating performance monitoring storage tables within memory of the I/O processor and generating a message that causes a fan internal to the host system to turn on in response to the pieces of data returned from the performance monitoring unit. Bromberg teach generating performance monitoring storage tables within memory of the I/O processor (see col. 4, lines 14-34) and generating a message that causes a fan internal to the host system to turn on in response to the

Art Unit: 2857

pieces of data returned from the performance monitoring unit (see Bromberg col. 6, lines 4-5).

The combination of Neufeld et al., Sandidge, and Bromberg clearly discloses the claimed invention.

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Contact Information

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carol S. Tsai whose telephone number is (703) 305-0851. The examiner can normally be reached on Monday-Friday from 7:30 AM to 4:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marc S. Hoff can be reached on (703) 308-1677. The fax number for TC 2800 is (703) 308-7382. Any inquiry of a

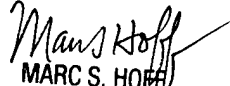
Art Unit: 2857

general nature or relating to the status of this application or proceeding should be directed to the TC 2800 receptionist whose telephone number is (703) 308-1782.

In order to reduce pendency and avoid potential delays, Group 2800 is encouraging FAXing of responses to Office actions directly into the Group at (703) 308-7382. This practice may be used for filing papers not requiring a fee. It may also be used for filing papers which require a fee by applicants who authorize charges to a PTO deposit account. Please identify the examiner and art unit at the top of your cover sheet. Papers submitted via FAX into Group 2800 will be promptly forwarded to the examiner.

Carol S. Tsai

09/03/02


MARC S. HOFF
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